



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,621	04/16/2004	Norbert Erhard	028972.53932US	7885

23911 7590 09/19/2005
CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER

LIN, ING HOUR

ART UNIT	PAPER NUMBER
----------	--------------

1725

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/825,621	ERHARD ET AL.	
	Examiner	Art Unit	
	Ing-Hour Lin	1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is generally narrative and indefinite, failing to conform with current U.S. practice because the claimed spray head lacks structural relationship between the claimed elements such as distributor blocks, connecting plates and connecting pieces. In claims 1, 11, 19 what element and how to make the claimed turnable connecting plates turn 180° when they are connected between the distributor block and connection pieces are unclear and not supported in the specification. “the spray nozzle” in claim 1, third line from the bottom, “the associated spray circuit group” in claim 2, line 3 and “the spray bar” in claim 6, last line, lack antecedent basis. “the distributor blocks include” in claim 11, line 3 and in claim 19, lines 3-4 is unclear. Shall it be changed to – each distributor block includes--?

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 1725

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-2, 4, 7-8, 11-12, 14, 16-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wollin in view of Hanano.

Wollin (col. 4, lines 51+) substantially teaches the claimed spray head, comprising support arm 6, distributor block (adapter 7) including vertical through-passages and transverse media passages, connecting plates (adapter modulus 8), connecting pieces (distribution modulus 12, distribution plate 9) and nozzle 4, wherein conduits for media, such as release agents, spray and blow air or control air, are provided in the individual plates and modules (col. 5, lines 40+).

Wollin fails to teach the use of a plurality of distributor block placed one against the other in the direction of movement of the arm. However, Hanano (col. 3, lines 66+ and Fig. 9) teaches the use of a plurality of distributor blocks (vertical through-passages 563 having height of a plurality of distributor blocks) for the purpose of providing a plurality of transverse passage connected to a plurality of spray nozzles 534 of different planes height related to the sprayed mold surfaces. It would have been obvious to one having ordinary skill in the art to provide Wollin the use of a plurality of distributor block as taught by Hanano in order to effectively

Art Unit: 1725

provide a plurality of transverse passages connected to a plurality of spray nozzles 534 of different planes height related to the sprayed mold surfaces.

6. Claims 3, 5-6, 13 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Wollin in view of Hanano and further in view of DE 4016377.

Wollin in view of Hanano fails to teach the use of connection block.

However, DE '377 (col. 2, lines 30+) teaches the use of connection block 7 in double faced spray nozzle head for the purpose of adjusting the effective distance between the nozzle head and the sprayed target. It would have been obvious to one having ordinary skill in the art to provide Wollin in view of Hanano the use of connection block as taught by DE '377 in order to effectively adjust the distance between the nozzle head and the sprayed target.

7. Claims 9-10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wollin in view of Hanano and further in view of DE 3741474.

Wollin in view of Hanano fails to teach the use of angled connection end piece.

However, DE '474 (col. 1, lines 65+) teaches the use of angled connection end piece 34 equipped with nozzles on two end faces for the purpose of effectively spraying the mold surfaces. It would have been obvious to one having ordinary skill in the art to provide Wollin in view of Hanano the use of angled connection end piece as taught by DE '474 in order to effectively spray the mold surfaces.

Art Unit: 1725

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ing-Hour Lin whose telephone number is (571) 272-1180. The examiner can normally be reached on M-F (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

I.H.L.

I.-H. Lin

9-12-05

KEVIN KERNS
PRIMARY EXAMINER

Kevin Kerns 9/13/05